

VARIABLE FOCUS SYSTEM

Abstract of the Disclosure:

A variable focus system (100) that includes an electrovariable optic (EVO) (108) and a controller (112) operatively configured for changing the focal configuration of the EVO. The EVO includes a plurality of movable optical elements (164) that may be moved substantially in unison with one another so as to change either the focal length (f) of the EVO, the direction of the focal axis (132) of the EVO, or both, depending upon the needs of a particular application. The variable focus system may be used in conjunction with an image source (116) to construct a 3D floating image projector (500, 540, 560, 600) that projects a series of 2D image slices (IS1-IS7) of a 3D image onto corresponding respective image planes (IP1-IP7) in succession rapidly enough that a 3D floating image (120) is perceived by a viewer (104).

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